Print mode	Valuejet 1638UH/UR 2xCMYK		Valuejet 1638UH/UR CMYKWV		Notes
High Quality (12 Pass on CMYK - 24 Pass on CMYKWV) 1080x1440 Vsd2 Fixed Small Dot - Bi-Dir / 400cps / **I-Weave UV** PQ 130 / WF2 / IP_,5 / DN2 / CV2 / **EF32**	**6,5** m²/h	Very good printing quality even with difficult files on difficult media	**3,8** m²/h	Very good printing quality even with difficult files on difficult media	Note : All speeds for the CMYKWV Ink combination are set in CMYK only, Single-layer printing. 2-layer printing will reduce speed by 52% and 3-layer printing will reduce speed by 70%
Normal Quality Fine (8 Pass on CMYK - 16 Pass on CMYKWV) **720x720** Vsd2 **Vardot** - Bi-Dir / 400cps / I-weave UV **PQ 180** / WF2 / **IP4,2** / DN2 / CV2 / EF32	**8,5** m²/h	A good printmode for all standard printjobs. Good speed - quality ratio	**5,0** m²/h	A very good printmode for all standard printjobs	UV Control Bi-Dir Start with these values. In case you experience insufficient curing, increase them to 75% or 100%
Normal Quality Robust (8 Pass on CMYK - 16 Pass on CMYKWV) **720x1440** Vsd2 **Fixed Middle Dot** - Bi-Dir / 400cps / I-weave UV **PQ 160** / WF2 / **IP2,4** / DN2 / CV2 / EF32	**8,5** m²/h	See above. Slightly more grain, but less banding in difficult jobs	**5,0** m²/h	See above. More grainy Better to counter banding	Outward (CW) L1 : 50% R1 : 50% L2 : 50% R2 : 50% L3 : 50% R3 : 50% L4 : 50% R4 : 50%
Medium Quality Fine (6 Pass on CMYK - 12 Pass on CMYKWV) 720x1080 Vsd2 **Vardot** - Bi-Dir / 400cps / I-weave UV PQ 170 / WF2 / **IP2,2** / DN2 / CV2 / EF32	**10,0** m²/h	Good for banner printing. Higher production mode. Banding depending on the image / media	**6,5** m²/h	Production mode	Homeward (CCW) L1 : 50% R1 : 50% L2 : 50% R2 : 50% L3 : 50% R3 : 50% L4 : 50% R4 : 50%
Medium Quality Robust (6 Pass on CMYK - 12 Pass on CMYKWV) 720x1080 Vsd2 **Fixed Large Dot** - Bi-Dir / 400cps / I-weave UV PQ 170 / WF2 / **IP2,3** / DN2 / CV2 / EF32	**10,0** m²/h	See above. More grain but less banding in difficult jobs	**6,5** m²/h	See above. More grain but less banding in case of difficult job / media	UV Control Uni-Dir Start with these values. In case you experience insufficient curing, increase them to 75% or 100%
Fast Mode (4 Pass on CMYK - 8 Pass on CMYKWV) 720x720 Vsd2 Fixed Large Dot - Bi-Dir / 400cps / **I-weave UV** PQ 180 / WF2 / IP2,3 / DN2 / CV2 / **EF32**	**13,5** m²/h	Fast printing. Fixed dot is advised to counter banding	**10,0** m²/h	Faster production mode. Medium quality. Grainy.	Outward (CW) L1 : 50% R1 : 50% L2 : 50% R2 : 50% L3 : 50% R3 : 50% L4 : 50% R4 : 50%
Draft Mode (4 Pass on CMYK - 8 Pass on CMYKWV) 720x720 Vsd2 Fixed Large Dot - Bi-Dir / 400cps / **None** PQ 180 / WF2 / IP2,3 / DN2 / CV2 / **EF20**	**22,0** m²/h	Draft output. No guarantees on quality	**14,0** m²/h	Draft output. No guarantees on quality	Homeward (CCW) L1 : 0% R1 : 0% L2 : 0% R2 : 0% L3 : 0% R3 : 0% L4 : 0% R4 : 0%

IMPORTANT NOTES

1 We strongly recommend to use only the **Vsd2 dot family** in combination with Mutoh UV inks. Smaller dot sizes can be troubled by static electricity and are meant only to be used in combination with lower head speeds and uni-dir printing for high quality.

2 To adjust the Vsd2 (10 / 20 / 29 ng) dot family (in 400cps carriage speed) in user mode, you need to select **pattern D (Setup - User type - Type# - 2: Adjust Print - Custom)** in the custom adjustments (make sure to adjust both **Rough** and **Fine** setting).
   In case you need to print with middle head height, we recommend to print in 320cps carriage velocity (CV1 command instead of CV2) to avoid ink mist. (In that case, you should adjust pattern A, both rough and fine)

3 **Var dot or Fixed Dot**? Vardot printing will result in lesser grainy prints. It can however create banding when printing large solid color areas. In case you are troubled by banding, we recommend printing with fixed dot.

4 We strongly recommend the **I-weave UV for all print modes** (best results to counter banding). It does not matter if you use I-weave UV 1, 2 or 3. Results & speeds are equal, it only changes the nozzle row that starts making the weave.

5 In case you need extreme sharpness, or if you see vertical grain lines appearing in solid colors (due to media cockling), switch your print mode to **UNI-dir** printing. This will also counter left/right color differences should any be visible.

6 The quality descriptions of the print modes are relative per printer and they are in this table not sideways comparable.

7 You are of course free to use any print mode available in the machine, but **in case you experience any quality issues**, we will always ask you to test your machine in the **SuperHigh Quality mode**, both in **Bi and Uni-dir** (to eliminate bi-dir or dot master issues),
   We also need to see a photo of the **header dump** to be absolutely sure that your rip software is using the correct commands (Setup menu - set 15: Header dump : Switch ON before making your print.)
   We will also ask you to **check the length** of your print to eliminate PF adjustment (step) issues. A print of 1000mm should differ maximum ± 1 mm to have good quality (keep in mind that your step adjust is influenced by the take-up).
   Measure both left and right side of your print, and DO NOT use a software length compensation, but a User step adjustment via the panel or PA command from rip **(Setup - User type - Type# - PF Adjust - 4 : Micro Print)**.